

REMARKS

I. Summary of the Office Action and this Reply

Claims 1-32 are pending in the application. The Examiner has rejected claims 1-10 under 35 U.S.C § 103(a) as unpatentable over U.S. Patent No. 6,085,199 to Rose ("Rose"), and claims 11-32 under 35 U.S.C § 103(a) as unpatentable over Rose in view of U.S. Patent No. 5,706,502 to Foley ("Foley").

Claims 1-5, 7, 8, 10-14, 17, 20, 21, 24, 28 and 30 have been amended. Attached hereto is a marked-up version of the changes made to the claims by the current amendment titled "Version with Markings to Show Changes Made."

Claims 25-27 have been canceled. Claims 33-35 have been added. Support for the new claims can be found, *inter alia*, in the claims as originally filed, Figure 2B, and at page 6, line 11 - page 11, line 5. No new matter has been added.

II. Claim for Domestic Priority

The Examiner's attention is drawn to the claim for domestic priority, under 35 U.S.C. § 119(e), to U.S. Provisional Patent Application No. 60/098,678, filed September 1, 1998. It is respectfully requested that the priority claim be expressly acknowledged by the Examiner (see paragraph 14 of the Office Action Summary).

III. Response to 103 Rejections

In paragraphs 3-5 of the Action, the Examiner rejected claims 1-10 under 35 U.S.C § 103(a) as unpatentable over U.S. Patent No. 6,085,199 to Rose, and claims 11-32 under 35 U.S.C § 103(a) as unpatentable over Rose in view of Foley.

The Present Invention

The present invention provides a computer-implemented method and apparatus for providing a logical point of access to multiple files. The single logical point of access is referred to as a "multilink." A multilink appears in a web page displayed by a web browser in the form of a traditional hyperlink. Application, page 6, line 24- page 7, line 1. However, unlike a traditional hyperlink which is associated with a single electronic address (e.g. URL) of a particular file (e.g. in the HTML coding), a multilink is associated with a plurality of electronic addresses (e.g. URLs). The addresses are concatenated within a single multilink URL ("mURL") associated with the multilink. Application, page 3, line 24 - page 4, line 9; page 6, lines 11 - page 7, line 1. For example, the mURL appears in an HTML source file, and the multilink is displayed as a hyperlink by a web browser interpreting the source file. See Figure 2B; page 9, lines 6-21.

The selection of a multilink (e.g. by a user's mouse click) results in display of a menu showing all of the hyperlinks accessible via the multilink. More specifically, selection of the multilink results in parsing the mURL to identify the individual URLs associated with the multilink, and display of the menu. The menu is preferably displayed as a pop-up menu. A user may then select a particular hyperlink from the menu to request/retrieve the desired file from the associated URL. Application, page 4, lines 9-19; page 10, lines 23-26; Figure 2B.

U.S. Patent No. 6,085,199 to Rose

Rose discloses a method for distributing a file in a plurality of different file formats. More specifically, Rose discloses displaying a web page in which multiple

prior art
hyperlinks are presented. See Rose, Figure 3. Each hyperlink is associated with a single file in a certain format. In accordance with the teachings of Rose, not all of the files listed via the hyperlinks are actually stored on the server. Rather some files for which hyperlinks are displayed may be created on an "as needed" basis, thereby reducing the number of files that would otherwise be needed to be stored on the server. Rose, col. 4, lines 40-67.

Accordingly, Rose teaches presenting multiple hyperlinks on a web page for a single file stored on a web server. This causes a greater number of hyperlinks to be displayed via web pages relative to the number of files stored on a web server. This results in web pages excessively populated with hyperlinks, i.e. "cluttered" web pages.

U.S. Patent No. 5,706,502 to Foley

Foley discloses an Internet-enabled portfolio manager system and method for portfolios of software projects that are distributed over a set of networked computers. Foley discloses a browser employed by the system to download from the Internet to a computer selected remote portfolio files as those selected portfolio files are needed by various portfolio methods as portfolios are processed. Foley, col. 2, line 44 - col. 3, line 3.

Argument

A Section 103 rejection is proper only if all claim limitations are taught or suggested by the prior art, MPEP §2143.03. Moreover, even if all elements are

found in the cited art, there must still be motivation in the cited art to make the proposed combination.

Claims 1-16

Contrary to the Examiner's assertion in paragraph 2 of the Action, Rose provides no disclosure whatsoever of a multilink. A multilink is displayed as a single hyperlink in a web page and yet provides a single, logical point of access to multiple files/hyperlinks. Application, page 6, line 24- page 7, line 1; page 3, line 24 - page 4, line 9; page 6, lines 11 - 23; page 9, lines 6-21; Figure 2B.

Rose teaches presenting a web page displaying multiple hyperlinks for a single file stored on a web server. This causes a greater number of hyperlinks to be displayed via web pages relative to the number of files stored on a web server. This results in web pages excessively populated with hyperlinks, i.e. "cluttered" web pages.

In contrast, the present invention teaches presenting a web page displaying a single hyperlink (namely, the multilink), for multiple files stored on a web server. Compare Figures 2A and 2B; page 9, lines 23-26. A menu of multiple hyperlinks is displayed on an "as needed" basis, only after selection of the associated multilink. In this manner, the present invention results in web pages with fewer hyperlinks, i.e. less cluttered web pages.

Rose provides no disclosure of a multilink, as defined in the application, which has a one-to-many relationship to files. Contrary to the Examiner's assertion in reference to claims 16 and 25, the web page/directory of Rose displaying multiple

hyperlinks is not a multilink as defined in the present application. Claim 1 has been amended to expressly recite display of a multilink providing a logical point of access to a plurality of files, each of the plurality of files having a respective unique electronic address. Rose neither teaches nor suggests such a multilink or displaying such a multilink.

Additionally, Rose provides no disclosure of generating a menu of options responsive to selection of a multilink, i.e. after selection of a multilink. Rather, Rose discloses displaying a web page/directory including multiple hyperlinks, each of which corresponds to a single file. The web page/directory of Rose is not a multilink and/or a menu of options generated responsive to selection of a multilink.

For at least these reasons, reconsideration and withdrawal of the rejection of claims 1-16 is respectfully requested.

Additionally, claim 5 requires that the multilink be associated with a multilink URL comprising multiple electronic addresses. Application, page 7, lines 10-17; and page 9, lines 3-21. Accordingly, a single hyperlink (the multilink) is associated with multiple electronic addresses. A multilink URL is neither taught nor suggested by Rose. Rose merely teaches that multiple hyperlinks may be associated with a single file stored on a server at a single electronic address. Claim 6 further requires parsing of the plurality of electronic addresses of a single multilink URL, which is neither taught nor suggested by Rose. Claim 8 requires a pop-up menu of options, which contributes to the reduction of cluttered web pages by superimposing a pop-up menu over the existing page containing the multilink. See Figure 2B; page 10, lines 23-26. This is neither taught nor suggested by Rose.

With respect to the Examiner's rejection of claims 9 and 10, it is emphasized that the web page of Rose containing multiple hyperlinks is not analogous to the menu of the present invention. Rose's "directory" function to cause display of multiple hyperlinks for a single native file is performed before display of the web page, or as part of the initial display of the web page. In contrast, the claimed invention requires generation and display of a menu of options after selection of a multilink, and therefore after the initial display of the web page containing the multilink.

For at least these additional reasons, reconsideration and withdrawal of the rejection of claims 5-16 is respectfully requested.

With respect to claims 11-14, neither Rose nor Foley teach or suggest a multilink URL, or any steps involving a multilink URL, as required by claims 11-14. A multilink URL (mURL) is a concatenation of individual electronic addresses (URLs) associated with the multilink. Application, page 3, line 24 - page 4, line 9; page 6, lines 11 - page 7, line 1. For at least these additional reasons, reconsideration and withdrawal of the rejection of claims 11-14 is respectfully requested.

Claims 17-24

Independent apparatus claims 17 and 21 have been amended similarly to amended method claim 1 to require a first computer program stored in the memory for displaying a multilink as a hyperlink, the multilink providing a logical point of access to a plurality of files, each of the plurality of files having a respective unique electronic address. Neither Rose nor Foley provide any disclosure whatsoever of such a hyperlink, as set forth in part above for claim 1.

Additionally, claims 17 and 21 require a second computer program stored in the memory for generating a menu of user-selectable options responsive to a user's selection of a multilink to a plurality of files. This is neither taught nor suggested by Rose or Foley, as discussed above. A menu of options is not a multilink. Furthermore, the web page displaying multiple hyperlinks for a single native file stored on the server is neither a menu of options nor a multilink, as discussed above.

Claims 18-20 depend from claim 17 and claims 22-24 depends from claim 21. For at least these reasons, reconsideration and withdrawal of the rejection of claims 17-24 is respectfully requested.

Claims 28-32

Independent apparatus claims 28 and 30 require a multilink URL. Additionally, claims 28 and 30 have been amended to require computer program for parsing a multilink URL comprising a plurality of electronic addresses to generate a menu of user-selectable options responsive to a user's selection of a multilink, each of the options corresponding to a respective one of the plurality of electronic addresses.

A multilink, selection of a multilink, a multilink URL including multiple electronic addresses, parsing of a multilink URL to identify the individual electronic addresses associated with the multilink, and generating of a menu of options, each of which corresponds to an electronic address of the multilink URL, are neither taught nor suggested by Rose or Foley.

For at least these reasons, reconsideration and withdrawal of the rejection of claims 28-32 is respectfully requested.

Claims 33-35

New claims 33-35 are believed patentable for similar reasons set forth above for claims 1-16. In particular, claim 33 expressly requires displaying a multilink as a hyperlink of a web page, the multilink providing a single logical point of access to a plurality of files, each of the plurality of files having a respective unique electronic address. This is neither taught nor suggested by Rose or Foley. Additionally, claim 33 requires displaying a menu of options superimposed over the web page in response to a user's selection of the multilink (see Figure 2B). This is neither taught nor suggested by Rose or Foley. Rose merely teaches display of a web page having multiple hyperlinks corresponding to a single file stored on a server.

Claims 34 and 35 require a multilink URL and parsing of the multilink URL, respectively, neither of which is taught or suggested by Rose or Foley, as discussed above.

Accordingly, claims 33-35 are believed patentable.

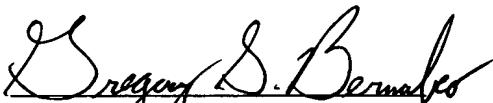
CONCLUSION

The present amendment does not require the payment of additional claim fees inasmuch as the total number of claims does not exceed 32 and the number of independent claims does not exceed 6.

In view of the foregoing amendments and remarks, Applicants believe claims 1-24 and 28-35 to be patentable and the application in condition for allowance. Applicants respectfully request issuance of a Notice of Allowance. If any issues remain, the undersigned request a telephone interview prior to the issuance of an action.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Detailed Description

The paragraph beginning at page 5, line 6 has been amended as follows:

Figure 1 is a symbolic diagram of a simplified Web topology as is known in the prior art. In the example of Figure 1, the Web client 6 is the user's computer. The client 6 may connect to an Internet Service Provider (not shown) over a communications line 10, using a modem in the client. The Internet Service Provider typically controls the proxy 16 which has a dedicated connection over a transmission link 20 to the Internet [36] 26, a sub-network of switching nodes and transmission links. A Web server 36 is connected to the Internet [36] 26 by a transmission link 30. In actuality, the Web's topology is much more complex with numerous servers, clients, proxies, transmission links, etc.

In the Claims

The claims have been amended as follows:

1. (Amended) A method of operation of a client computer comprising the steps of:
 - (a) displaying a multilink as a hyperlink, the multilink providing a logical point of access to a plurality of files, each of the plurality of files having a respective unique electronic address;
 - (b) generating a menu of options, at the client computer, in response to a user's selection of [a] the multilink [to a plurality of files]; and

([b] c) transmitting, from the client computer, a request for a user-selected file associated with a user-selected option.

2. (Amended) The method of claim 1, wherein [each of the plurality of files has a unique electronic address and] each of the options [are] is associated with at least one of the plurality of files.

3. (Amended) The method of claim 2, further comprising the step of: ([c] d) selecting, at the client computer, the user-selected option from the menu of options, the user-selected option being associated with the user-selected file, step ([c] d) being performed intermediate steps ([a] b) and ([b] c).

4. (Amended) The method of claim 3, wherein the request transmitted in step ([b] c) identifies the unique electronic address of the user-selected file.

5. (Amended) The method of claim [4] 1, wherein the multilink is associated with a multilink URL comprising a plurality of electronic addresses.

7. (Amended) The method of claim 6, wherein the menu of options is generated in step ([a] b) by a computer program for parsing the multilink URL to identify the plurality of electronic addresses and generating the menu of options.

8. (Amended) The method of claim 7, wherein the [computer program is written in the Javascript programming language] menu of options comprises a pop-up menu.

10. (Amended) The method of claim 9, further comprising the step of: ([d] e) receiving, at the client computer, the computer program, step ([d] e) being performed before step ([a] b).

11. (Amended) The method of claim 10, wherein a proxy computer for relaying a communication between a client computer and a server computer interconnects the client computer to the server computer and wherein the proxy computer appends the computer program to every file transmitted from the proxy computer, the method further comprising the step of:

([e] f) transmitting, from the proxy computer to the client computer, a file containing a multilink URL, the file having the computer program appended thereto, step ([e] f) being performed before step ([d] e).

12. (Amended) The method of claim 10, wherein a proxy computer for relaying a communication between a client computer and a server computer interconnects the client computer to the server computer and wherein the proxy computer appends the computer program to every file containing a multilink URL which is transmitted from the proxy computer, the method further comprising the step of:

([e] f) transmitting, from the proxy computer to the client computer, a file containing a multilink URL, the file having the computer program appended thereto, step ([e] f) being performed before step ([d] e).

13. (Amended) The method of claim 10, wherein a proxy computer for relaying a communication between a client computer and a server computer interconnects the client computer to the server computer and wherein the proxy computer embeds a reference to the computer program in every file transmitted from the proxy computer, the method further comprising the steps of:

([e] f) transmitting, from the proxy computer to the client computer, a file containing a multilink URL, the file having the reference to the computer program embedded therein, step ([e] f) being performed before step ([d] e); and

([f] g) transmitting, from the client computer, a request for transmission of the computer program to the client computer, step ([f] g) being performed intermediate steps ([e] f) and ([d] e).

14. (Amended) The method of claim 10, wherein a proxy computer for relaying a communication between a client computer and a server computer interconnects the client computer to the server computer and wherein the proxy computer embeds a reference to the computer program in every file containing a multilink URL which is transmitted from the proxy computer, the method further comprising the steps of:

- ([e] f) transmitting, from the proxy computer to the client computer, a file containing a multilink URL, the file having the reference to the computer program embedded therein, step ([e] f) being performed before step ([d] e); and
- ([f] g) transmitting, from the client computer, a request for transmission of the computer program to the client computer, step ([f] g) being performed intermediate steps ([e] f) and ([d] e).

17. (Amended) A servicing computer for servicing a request for a file initiated by a client computer connected to the servicing computer by a communications network, the servicing computer comprising:

- a memory;
- a processor;
- a first computer program stored in the memory for displaying a multilink as a hyperlink, the multilink providing a logical point of access to a plurality of files, each of the plurality of files having a respective unique electronic address;
- a second computer program stored in the memory for generating a menu of user-selectable options responsive to a user's selection of a multilink to a plurality of files; and
- a [second] third computer program stored in the memory for appending the first computer program to a file transmitted by the servicing computer.

20. (Amended) The servicing computer of claim 19, wherein the [second] third computer program is configured to append the [first] second computer program only to files transmitted by the servicing computer which contain a multilink URL.

21. (Amended) A servicing computer for servicing a request for a file initiated by a client computer connected to the servicing computer by a communications network, the servicing computer comprising:

a memory;

a processor;

a first computer program stored in the memory for displaying a multilink as a hyperlink, the multilink providing a logical point of access to a plurality of files, each of the plurality of files having a respective unique electronic address;

a second computer program stored in the memory for generating a menu of user-selectable options responsive to a user's selection of a multilink to a plurality of files; and

a [second] third computer program stored in the memory for embedding a reference to the [first] second computer program to a file transmitted by the servicing computer.

24. (Amended) The servicing computer of claim 23, wherein the [second] third computer program is configured to embed a reference only in files transmitted by the servicing computer which contain a multilink URL.

28. (Amended) A method of operation of a servicing computer for servicing a request from a client computer for a file stored on the servicing computer, the method comprising the steps of:

- (a) appending, to the file requested by the client computer, a computer program for [generating] parsing a multilink URL comprising a plurality of electronic addresses to generate a menu of user-selectable options responsive to a user's selection of a multilink, each of the options corresponding to a respective one of the plurality of electronic addresses; and
- (b) transmitting the file to the client computer responsive to a request therefor.

30. (Amended) A method of operation of a servicing computer for servicing a request from a client computer for a file stored on the servicing computer, the method comprising the steps of:

- (a) embedding, in the file requested by the client computer, a reference to a computer program for [generating] parsing a multilink URL comprising a plurality of electronic addresses to generate a menu of user-selectable options responsive to a user's selection of a [-]multilink, each of the options corresponding to a respective one of the plurality of electronic addresses; and
- (b) transmitting the file to the client computer responsive to a request therefor.